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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BOCURE, TESFALDET

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

01/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,363	Applicant(s) AMIRICHIMEH ET AL.	
	Examiner Tesfaldet Bocure	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-21 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/31/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3 and 5-21 are pending in the Application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over t. **Robinson et al., Robinson** hereinafter (US patent publication No. 7,133,648, newly cited, of a record) in view of **Dove et al., Dove** hereinafter (US patent number 6,798,784, newly cited).

Robinson teaches a bidirectional transceiver cells (see figures 1A and 1B) having a plurality of Serializer-Deserializer (SERDES), comprising: each SERDES

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transceiver cell having a transmitter (119) and receiver (118), wherein the transmitter is phase locked to the corresponding receiver (see PLL 106 in figures 1A and 1B and col. 1, lines 49-65 and col. 3, lines 13-56) as in claim 1.

Robinson fails to teach that each of the transmit channel of each SERDS lane is phase-locked with corresponding received channel of a different SERDS lane than that of the transmit channel as in claim 1.

Dove for the same endeavor as the instant application and that of **Robinson** teaches a plurality SERDS (figure 9, see SDERDS 152 and SERDS 154 from different units communicating through the lines 132a and 132b), wherein each SERDS in different lane communicate with each other and each of the SERDS having inherent means for synchronization, claimed phase locking.

Therefore, it would have been obvious to one of an ordinary skill in the art to the synchronization of different SERDS at the time the invention was made.

Further to claim 2, **Robinson** also teaches that each SERDES cell receives and transmits data to and from external components connected to the SERDES core (see transceiver cell in figs 1A and 1B receiving and transmitting from external I/O data 199 and 122).

Further to claim 5, **Robinson** shows that the bidirectional transceiver cell having SERDES as shown in figures 1A and 1b is in one cell and that the bidirectional transceiver being with element 160 in figures 1A and 1B, and reads on the claimed common SERDES core in claim 5.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Robinson et al., Robinson** hereinafter (US patent publication No. 7,133,648, of a record) in view of **Dove et al. Dove** hereinafter (US patent number 5,434,719, newly cited) and further in view of **Miller et al, Miller** hereinafter (US patent number 5,434,719, of a record).

Robinson and Dove teach the claimed subject matter in claims 1 and 2 indicated above in paragraph 5. Further also teaches that the transceiver SERDES receiving from and transmitting to I/O units, however fails to teaches that the I/O unit receiving and transmitting to and from a disc driver.

Miller for the same endeavor teaches, a SERDES communicating with external device, wherein the external device being a disc drive (see SERDES 21 communicating with disc drive 22) for writing and reading data to and from.

Therefore, it would have been obvious to one of an ordinary skill in the art the I/O of Robinson to receive and transmit data, including but not limited to a disc drive data, from **Miller** at the time the invention was made.

Response to Amendment

7. Applicant's arguments with respect to claims 1-3 and 5 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Allowable Subject Matter

9. Claims 11-21 are allowed.

10. Claims 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: the claimed subject matter in claims 6-21 is allowable because the arts of record fail to teach or fairly suggest the claimed “transceiver system of claim 1, wherein the transmit channel is part of a first SERDES lane of a first SERDES core, and the corresponding receive channel is part of a second SERDES lane of a second SERDES core” as in claims 6-10, see figs 6C-6E, fig. 6D for common substrate in claims 7 and 8 and fig. 6E for first and second substrate in claim 9; and “A method of transferring data from a first external component to a second external component using an active transceiver unit (the active transceiver unit acting as a repeater or relay), wherein the transceiver unit having a plurality transceiver chips each having SERDES, and the active transceiver’s transmitter and receiver phase locked with each other for transmitting external component data from the first to the second external component” as in claim 11 (see fig. 1).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Mohammed H. Ghayour can be reached on (571) 272-3021. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tsfaldet Bocure/
Primary Examiner, Art Unit 2611

/T. B./
Primary Examiner, Art Unit 2611